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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,550	12/14/2005	Joachim Damrath	2002P01546WOUS	8033

46726 7590 04/08/2008
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EXAMINER

LAWRENCE JR, FRANK M

ART UNIT	PAPER NUMBER
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1797

MAIL DATE	DELIVERY MODE
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04/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/539,550	Applicant(s) DAMRATH ET AL.	
	Examiner Frank M. Lawrence	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-76 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 39-75 is/are rejected.
- 7) ☒ Claim(s) 76 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/16/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: It is suggested that section headings such as "background of the invention" be inserted into the specification. In line 2 of claim 58, "ordor" should be changed to "odor."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 39-55, 58, 62-66 and 71-74 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 39, it is unclear whether regeneration of the sorbent is being recited as a separate method step or if it is an intended result of the passing step. The claim should be amended to clarify that the regeneration step is separate as in canceled claim 1. Claim 62 is unclear what is meant by "heat exchanger sorbent" in line 5. Claims 40-52, 55 and 63-66 are rejected for depending from a rejected parent claim.
4. Claims 53 and 54 each recites the limitation "said room" in lines 12 and 13, respectively. There is insufficient antecedent basis for this limitation in the claims.
5. Claim 58 recites the limitation "said fat filter" in line 3. There is insufficient antecedent basis for this limitation in the claim.
6. Claims 71, 72, 73 and 74 each recites the limitation "said main line" in lines 6, 3, 4 and 2, respectively. There is insufficient antecedent basis for this limitation in the claims.

Art Unit: 1797

7. Claims 73 and 74 each recites the limitation "said heat exchanger" in line 2 of each claim.

There is insufficient antecedent basis for this limitation in the claims.

8. Claim 74 recites the limitation "said heating device" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 39, 40, 46-52, 55, 56, 59-63, 66, 67 and 75 are rejected under 35 U.S.C. 102(b) as being anticipated by the German reference (DE 3739145 A1).

11. DE '145 teaches a system for dehumidifying air from cooking exhaust in a room, comprising passing the air into a housing containing a bulk water vapor adsorbent (4) with a fan (6), regenerating the adsorbent with an embedded heater (8) while the fan operates at a reduced speed, condensing moisture from the air in a condenser (7) downstream from the adsorbent, collecting condensed water in a trough drain (10), and returning a portion of the air stream back to the room downstream of the adsorbent through a conduit (2). The condenser can be cooled by room air (see figure 3, English translation obtained on the EPO website).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1797

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 41, 42, 45, 57, 58, 64 and 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE '145 in view of the German reference (DE 10126842 A1).

14. DE '145 discloses all of the limitations of the claims except that there is a fat filter upstream from the adsorbent, an odor filter downstream from the fat filter, a preferred water sorbent, a fan for cooling the condenser, and that the sorbent is adhered to multiple porous carriers arranged in parallel or in series. DE '842 discloses a kitchen fume hood for drying exhaust air, comprising a vortex filter (1) and expanded metal layers (2) for capturing grease, a water sorbent filter (3) including zeolite, silica gel, or inorganic salts supported on a porous foam material, and a downstream odor filter (4) arranged in a housing.

15. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the dehumidifier of DE '145 by including a fat filter, an odor filter and a preferred moisture sorbent in order to provide a means for removing other substances present in cooking exhaust air, and a sorbent that is known to be useful in removing moisture. It would also have been obvious to use a supported sorbent in order to provide a high surface contact area with a low pressure drop, and to use multiple filters in series or parallel to provide a multiplication in the filter's effect. It is submitted that one skilled in the art would understand that the condenser requires some type of cooling device, and would have known to use a cooling fluid such as air supplied by a fan.

Allowable Subject Matter

16. Claim 76 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. Claims 43, 44, 53, 54, 65 and 71-74 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form disclose gas treatment devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frank M. Lawrence/
Primary Examiner, Art Unit 1797

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